

Appendix 1: Overview of Home-Generated Pharmaceutical Collection Programs Outside of California

International Programs	Canada: Alberta*	Canada: British Columbia*	Canada: Nova Scotia*	Canada: Saskat- chewan*	Australia: Return Unwanted Medicines (RUM) Project	France : Cyclamed Program	Portugal: Valormed Program	Spain Integrated Waste MaNAgeMENT System (SIGRE)	Sweden: Apoteket AB Environmental Program
Sources	1	1	1	1	1	1	1	1	1
Type of Funding	Mainly Industry & small provincial gov't grants	Industry	Industry	Community Pharmacies	Mainly Federal Gov't (with some Industry)	Industry, pharmacies, wholesalers	Pharma- ceutical companies pay an eco-fee of 0.00504 Euro for each package placed in market	Parmaceutical industry based on vol. of sales, SIGRE is a non- profit stewardship org	Federal government. Apoteket is a national retail pharmacy. Also takes meds from hospitals, vets, dentists, etc.
Start date	1988	1996	Mid 90s	1997	1999	1993	2001	2003	2070
Population (2006)*	3,300,000	4,300,000	930,000	990,000	20,000,000	63,000,000	10,600,000	45,200,000	9,100,000
Collection point	Pharmacies	Pharmacies	Pharmacies	Pharmacies	Pharmacies	Pharmacies	Pharmacies	Pharmacies	Pharmacies
Total program cost (US \$, 2006)	NA	\$333,606	\$34,808	NA	\$1,144,802	\$3,878,534	NA	NA	\$1,149,775
Cost(\$)/capita (preliminary estimate)	NA	\$0.08	\$0.04	NA	\$0.06	\$0.06	NA	NA	\$0.13
Cost (\$)/unit collected	NA	\$0.006/pill	\$0.001/pill	NA	NA	0.4 euros/ kilo	NA	NA	1.6 eruo/ kilo
EOL materials management (% of total program cost)	NA	NA	NA	NA	NA	63%	NA	NA	NA

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Environmental									
Product collected (metric tonnes)	37	23	10.6	16.4	NA	13,169	694	2,624	1019
Percent collected (from available for collection)	NA	NA	NA	NA	NA	80%	NA	NA	65-75%
Program effectiveness									
Pharmacy Participation (Total #)	900	985	259	350	5000	22,500	2,786	20,406	980
Pharmacy Participation (Percent)	100	96	100	90	100	85	98.5	100	100
Collection Per Capita (kilograms/capita)	0.01	0.005	0.01	0.02	0.017	0.21 (0.09 w/o pkg)	0.054	0.058	0.1
Public awareness/participation	NA	NA	NA	NA	60%	77%	NA	NA	43%

* Other Canadian provinces have programs, these four were selected for their performance with one of the following factors: high collection, high collection/capita, or low cost.

Appendix 1 (continued)

State Programs	Colorado: Pilot	Iowa: Pilot	Maine: pilot	Washington State: Pilot
Sources	3, 8,9	3, 5, 7	2, 3	3, 4, 5, 10, 11
Type of Funding	USEPA leases 10 collection boxes; State grants (public health and pollution prevention) \$27,000, Local water agency	State grants to participating pharmacies (funded by grant) or consumers purchase mail back envelopes	USEPA grant for mail back program	Public and Private Sectors (variety of federal, state and local govt entities, health coop, and pharmacy chain)
Start date	2009	2009	2007	2006
Population (2006)*	4,751,474	2,967,270	1,313,355	6,360,529
Collection Point	Pharmacies & local health agencies	Pharmacies or mail back	Mail Back	Pharmacies
Total program cost (US \$, 2006), except as noted	Unclear. Variety of sources. Some amounts not specified.	\$165,000 (over 3 years)	\$150,000 (over 2 years)	NA
Cost(\$)/capita	NA	NA	NA	NA
Cost (\$)/unit sold				\$0.01 to \$0.02 per container
Cost (\$)/unit collected	NA	NA	\$18.79/mailer (actual & in-kind costs phase I and II), \$7.50 /mailer phase III (longer term), ave weight of mailer 7 ounces	NA
Environmental				
Product (with its packaging)	NA	NA	1.15 tons	5 tons
Percent collected (from available for collection)	NA	NA	NA	NA
Program effectiveness				
Pharmacy Participation (Total #)	NA	NA	NA	54 MWR facilities, 1,300 pharmacies
Pharmacy Participation (Percent)	NA	NA	NA	NA
Collection Per Capita (kilograms/capita)	NA	NA	NA	NA
Public awareness/participation	NA	NA	NA	NA

Appendix 1 (continued)

Sources	Type of Resource	Date	Weblink
1. Health Canada Environmental Impact Initiative	Report	November 1, 2009	http://www.enviroadvisory.com/pdf/Takeback.pdf
2. EPA website	Executive Summary to ME report	April 1, 2010	http://www.epa.gov/aging/RX-report-Exe-Sum/
	Access to full ME report	April 1, 2010	http://www.surveymonkey.com/s/HSGKBDD
3. US census	Database	2006	http://www.census.gov/popest/states/tables/NST-EST2008-01.xls
4. Snohomish County Solid Waste Management Division	Presentation	June 30, 1905	http://www.productstewardship.us/associations/6596/files/Se-go_Jackson_presentation2.ppt
5. Oregon Pharmaceutical Take Back Stakeholder Group	Report	July 1, 2007	http://www.oracwa.org/downloads/drugtakeback-rpt_0907.pdf
6. Iowa Pharmacy Association	Frequently Asked Questions	2007	http://www.iarx.org/TakeAway/Default.aspx#FAQ
7. Souix City Journal	Newspaper Article	February 1, 2010	http://www.siouxcityjournal.com/news/local/article_1fe2192e-93cf-5308-ae24-d1d4ce4b25a0.html
8. Colorado Department of Public Health and Environment	Press Release	2009	http://www.cdphe.state.co.us/release/2009/121009.html
9. Colorado Department of Public Health and Environment	Presentation	October 2, 2009	http://www.cephweb.com/documents/MedicationTake-BackPilotProjectCEHAPowerpoint.ppt
10. Northern Light	Newspaper Article	May 24, 2010	http://www.cephweb.com/documents/MedicationTake-BackPilotProjectCEHAPowerpoint.ppt
11. Progress Report for Pharmaceuticals from Households: A Return Mechanism (PH:ARM)	Fact Sheet	April 1, 2008	http://www.productstewardship.us/associations/6596/files/PH-ARMProgressReport2Apr2008.pdf